## TECHNICAL REVIEW DOCUMENT for MODIFICATION TO OPERATING PERMIT 960PBO131

Public Service Company of Colorado – Valmont Station Boulder County Source ID 0130001

> Prepared by Jacqueline Joyce February 2012 Revised May 2012

## I. Purpose:

This document establishes the decisions made regarding the requested modification to the Operating Permit for Public Service Company of Colorado's Valmont Station. This document provides information describing the type of modification and the changes made to the permit as requested by the source and the changes made due to the Division's analysis. This document is designed for reference during review of the proposed permit by EPA and for future reference by the Division to aid in any additional permit modifications at this facility. The conclusions made in this report are based on the information provided in the requests for modification submitted to the Division on February 10, 2012, additional information submitted on May 3, 2012, e-mail correspondence and telephone conversations with the source. This narrative is intended only as an adjunct for the reviewer and has no legal standing.

Any revisions made to the underlying construction permits associated with this facility made in conjunction with the processing of this operating permit application have been reviewed in accordance with the requirements of Regulation No. 3, Part B, Construction Permits, and have been found to meet all applicable substantive and procedural requirements. This operating permit incorporates and shall be considered to be a combined construction/operating permit for any such revision, and the permittee shall be allowed to operate under the revised conditions upon issuance of this operating permit without applying for a revision to this permit or for an additional or revised construction permit.

## II. Description of Permit Modification Request/Modification Type

The Operating Permit for Valmont Station was issued on September 1, 2001 and was renewed on March 1, 2010. Public Service Company of Colorado (PSCo) submitted a request to modify the permit on February 10, 2012 to replace the existing auxiliary boiler with a new auxiliary boiler. Prior to issuance of the permit, the source submitted information on May 3, 2012 indicating minor changes to the boiler design (slight design heat input and emission increases)

Colorado Regulation No. 3, Part C, Section X.A identifies those modifications that can

be processed under the minor permit modification procedures. Specifically, minor permit modifications "are not otherwise required by the Division to be processed as a significant modification" (Colorado Regulation No. 3, Part C, Section X.A.6).

The Division requires that "any change that causes a significant increase in emissions" be processed as a significant modification (Colorado Regulation No. 3, Part C, Section I.A.7.(a)). According to Part G of Regulation No. 3 (Section I.L, revisions adopted July 15, 1993, Subsection I.G for modifications) the Division considers that a significant increase in emissions is the potential to emit above the PSD significance. In their application, the source estimated emissions from the proposed new auxiliary boiler using manufacturer's emission factors, design rate and 8760 hours per year of operation and emissions were below the significance level as shown in the table below. Therefore, since the PTE of the proposed new auxiliary boiler is below the NANSR/PSD significance levels, this modification qualifies as a minor modification.

Scenario	$NO_X$	СО	VOC	PM/PM <sub>10</sub> /PM <sub>2.5</sub> <sup>1</sup>	SO <sub>2</sub>
Emission Factor (lb/MMBtu)	0.035	0.0375	0.016	0.010	1.0 x 10 <sup>-3</sup>
Emissions (lb/hr)	0.44	0.47	0.20	0.13	1.3x10 <sup>-2</sup>
Emissions (tons/yr)	1.93	2.07	0.88	0.55	0.06
PSD/NANSR significance level (T5 Minor Mod Level)	40	100	40	25/15/10	40

 $^{1}$ Assumes PM = PM $_{10}$  = PM $_{2.5}$ . Note that manufacturer's data sheet indicates that the emission factor is for filterable PM. The AP-42 emission factor (Section 1.4, dated 7/98, Table 1.4-2) for total PM (filterable and condensable) is 7.6 lb/MMScf (which converts to 7.45 x  $10^{-3}$  lb/MMBtu as indicated in footnote a) and is lower than the manufacturer's estimate for filterable PM.

In addition, the Division requires that "any change that is considered a modification under Title I of the Federal Act" be processed as a significant permit modification (Colorado Regulation No. 3, Part C, Section I.A.7.b). Part G of Regulation 3 Section I.L, revisions adopted July 15, 1993, Subsection I.G for modifications) describes more specifically what constitutes a modification under Title I of the Federal Act and it indicates that a modification which triggers either Section 111 ((new source performance standards (NSPS)) or 112 (national emission standards for hazardous air pollutants (NESHAP))) requirements is considered a Title I modification. This proposed new boiler is subject to the provisions in 40 CFR Part 60 Subpart Dc (NSPS requirements) and 40 CFR Part 63 Subpart DDDDD (NESHAP requirements). However, the Division considers that modifications that trigger either NSPS or NESHAP requirements that consist of non-substantive requirements such as work practices or recordkeeping requirements can be processed as a minor modification.

Because the boiler only burns natural gas as fuel, the only applicable requirements in 40 CFR Part 60 Subpart Dc is a requirement to retain records of fuel consumption. Therefore, since public comment would not be required if this boiler were processed as a construction permit and because the NSPS requirements are not substantive (i.e. not

an emission limitation, control requirement or design restriction), the Division considers that this modification can be processed as a minor modification.

The boiler is also subject to requirements in 40 CFR Part 63 Subpart DDDDD and under the current rules (published in the Federal Register on March 21, 2011), since this boiler burns natural gas, the boiler is only subject to work practice requirements, specifically the source will be required to conduct tune-ups on the boiler annually. Since the NESHAP requirements are work practice requirements and not substantive the Division considers that this modification can be processed as a minor modification. This is consistent with Division policy (PS Memo 99-06, revised February 27, 2008) regarding public comment requirements. PS Memo 99-06, specifies that public comment would not be required for area sources that are subject to non-substantive MACT requirements, such as recordkeeping or work practice requirements. Although this policy specifically applies to public comment requirements for area sources subject to non-substantive MACT requirements, this policy can be reasonably applied to major sources of HAPS that are subject to non-substantive MACT requirements.

## III. Modeling

Emissions from the proposed new auxiliary boiler are below modeling thresholds specified in the Division's Colorado Modeling Guideline's May 20, 2011 Updated Tables as indicated in the table below. Therefore, modeling is not warranted for this modification.

Pollutant	Modeling Threshold		Project Emissions		
	Annual	Short-Term	Annual	Short-Term	
СО	100 tons/yr	23 lbs/hr	2.07 tons/yr	0.47 lbs/hr	
$NO_X$	40 tons/yr	0.46 lbs/hr	1.93 tons/yr	0.44 lbs/hr	
SO <sub>2</sub>	40 tons/yr	0.46 lbs/hr	0.06 tons/yr	1.3 x 10 <sup>-2</sup> lbs/hr	
PM <sub>10</sub>	15 tons/yr	82 lbs/day	0.55 tons/yr	3.12 lbs/day	
PM <sub>2.5</sub>	5 tons/yr	11 lbs/day	0.55 tons/yr	3.12 lbs/day	

#### IV. Discussion of Modifications Made

#### **Source Requested Modifications**

The Division addressed the source's requested modifications as follows:

#### **New Auxiliary Boiler**

Provisions for the proposed new auxiliary boiler will be included in Section II.21 (this section previously included the regional haze requirements).

Natural Gas-Fired Boiler, Model and Nos. unknown, Rated at 12.60 MMBtu/hr. This boiler is equipped with Webster Engineering Low  $NO_X$  Burners (Model No. HDSX7G-250A).

- **1. Applicable Requirements:** The following requirements apply to the proposed new auxiliary boiler:
  - Construction of this source must commence within 18 months of initial approval permit issuance date or within 18 months of date on which such construction or activity was scheduled to commence as stated in the application (Reg 3, Part B, Section III.F.4.a.(i) thru (ii)).
  - Within 180 days after commencement of operation, compliance with the conditions contained on this permit shall be demonstrated to the Division (Reg 3, Part B, Section III.G.2).
  - The permittee shall notify the Division, in writing, fifteen (15) days after startup (Reg 3, Part B, Section III.G.1).
  - Except as provided for below, visible emissions shall not exceed 20% opacity (Reg 1, Section II.A.1)
  - Visible emissions shall not exceed 30% opacity, for a period or periods aggregating more than six (6) minutes in any sixty (60) minute period, during fire building, cleaning of fire boxes, soot blowing, start-up, process modifications, or adjustment or occasional cleaning of control equipment (Reg 1, Section II.A.4)
  - Particulate matter emissions shall not exceed 0.5(FI)<sup>-0.26</sup> lbs/MMBtu, where FI is the fuel input in MMBtu/hr (Reg 1, Section III.A.1.b).
    - For the permit, the design heat input of 12.60 MMBtu/hr was used in the above equation to calculate the particulate matter emission limit.
  - Emission and fuel consumption limits.
    - NO<sub>x</sub> emissions shall not exceed 1.93 tons/yr
    - CO emissions shall not exceed 2.07 tons/yr
      - Based on the manufacturer's emission factors, design rate and 8760 hours per year of operation, PM, PM<sub>10</sub>, PM<sub>2.5</sub>, VOC and  $SO_2$  emissions are below the APEN de minimis level and therefore limits for those pollutants are not included in the permit.
    - Natural gas consumption shall not exceed 108.2 MMscf/yr.
      - The consumption limit is based on a natural gas heat content of 1020 Btu/scf.
  - RACT for NO<sub>X</sub>, CO and PM<sub>10</sub> shall be met through use of low NO<sub>X</sub> burners (NO<sub>X</sub>), good combustion practices (CO) and natural gas as fuel (PM<sub>10</sub>) (Reg 3, Part B, Section III.D.2.a)

- RACT for VOC shall be considered good combustion practices (Reg 3, Part B, Section IIII.D.2.a and Reg 7, Section II.C.2)
- 40 CFR Part 60 Subpart Dc, "Standards of Performance Small Industrial-Commercial-Institutional Steam Generating Units", as adopted by reference in Colorado Regulation No. 6, Part A, as follows:
  - Notification requirements in § 60.48c(a)
  - Maintain records of fuel consumption per § 60.48c(g)
  - Maintain records for 2 years per § 60.48c(j)
- The boiler is also subject to the requirements in 40 CFR Part 60 Subpart A New Source Performance Standards – General Provisions, as adopted by reference in Colorado Regulation No. 6, Part A. The appropriate general provisions will be included in the permit.
- State-only requirement. The boiler is subject to Regulation No. 6 Standards of Performance for New Stationary Sources, Part B – Specific Facilities and Sources, Non-Federal NSPS, II – Standards of Performance for New Fuel-Burning Equipment, as follows:
  - Opacity of emissions shall not exceed 20%
  - Particulate matter emissions shall not exceed 0.5(FI)<sup>-0.26</sup> lbs/MMBtu, where FI = fuel input in MMBtu/hr
- The permit will include a requirement to remove and/or render the existing auxiliary boiler inoperable upon startup of the new auxiliary boiler. The permit will require that a notice to cancel the APEN for the existing auxiliary boiler be submitted within 30 days of commencing operation of the new auxiliary boiler.
- The boiler is also subject to the requirements in 40 CFR Part 63 Subpart DDDDD, "National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters".

Note that although EPA initially stayed the effective date for the March 21, 2011 rules, the stay has been lifted and these rules are in effect. Proposed revisions to these rules were published on December 23, 2011 but it appears that the proposed rules do not change the requirements for this boiler. The Division will include the applicable requirements for this unit in the permit but will note that a proposed rule is out and it is possible that the requirements will change.

### **Streamlining of Applicable Requirements**

#### Opacity

The boiler is subject to the Reg 1 20% opacity requirement and the Reg 1 30% opacity

requirement for certain specific operating conditions. The Reg 1 20% opacity requirement applies at all times, except for certain specific operational activities under which the Reg 1 30% opacity requirement applies. The boiler is also subject to the state-only Reg 6, Part B 20% opacity requirement. Reg 6, Part B, Section I.A, adopts, by reference, the 40 CFR Part 60 Subpart A general provisions. 40 CFR Part 60 Subpart A § 60.11(c) specifies that the opacity requirements are not applicable during periods of startup, shutdown and malfunction. The Reg 1 20%/30% requirements are more stringent than the Reg 6 Part B opacity requirements during periods of startup, shutdown and malfunction. While the Reg 6, Part B 20% opacity requirement is more stringent during fire building, cleaning of fire boxes, soot blowing, process modifications and adjustment or occasional cleaning of control equipment. Therefore, since no one opacity requirement is more stringent than the other at all times, all three opacity requirements are included in the operating permit. See the opacity grid on page 12 for a clarified view on the opacity requirements and their relative stringency.

Since this boiler burns natural gas as fuel, the Division will presume, in the absence of credible evidence to the contrary, that these units are in compliance with all of the opacity requirements.

### <u>PM</u>

The boiler is subject to the Reg 1 particulate matter requirements and the state-only, Reg 6, Part B particulate matter requirements. The particulate matter requirements in both Reg 1 and Reg 6, Part B are the same standard. The Reg 1 particulate matter requirements apply at all times. Reg 6, Part B, Section I.A, adopts, by reference, the 40 CFR Part 60 Subpart A general provisions. Although not specifically stated in the general provisions, the Division has concluded after reviewing EPA determinations that the NSPS standards are not applicable during startup, shutdown and malfunction, although any excess emissions during these periods must be reported in the quarterly excess emission reports, if required. Specifically, EPA has indicated (4/18/75, determination control no. A007) that when 40 CFR Part 60 Subpart A § 60.11(d) was developed "...it was recognized that sources which ordinarily comply with the standards may during periods of startup, shutdown and malfunction unavoidably release pollutants in excess of the standards." In addition, EPA has also indicated (5/15/74, determination control number D034) that "[s]ection 60.11(a) makes it clear that the data obtained from these reports are not used in determining violations of the emission standards. Our purpose in requiring the submittal of excess emissions is to determine whether affected facilities are being operated and maintained 'in a manner consistent with good air pollution control practices for minimizing emissions' as required by 60.11(d)." Therefore, the Division considers that the Reg 6, Part B particulate matter requirements do not apply during periods of startup, shutdown and malfunction. As a result, the Reg 6, Part B requirements have been streamlined out of the permit.

## <u>Monitoring</u>

NSPS Dc requires that records be kept for a period of 2 years, while Reg 3, Part C,

Section V.C.6 requires that records be retained for five (5). Therefore, the NSPS recordkeeping requirement will be streamlined out of the permit.

**2. Emission Factors:** Approval of emission factors is necessary to monitor compliance with the permit limitations. Emissions from this project are based on the following emission factors.

Pollutant <sup>1</sup>	Emission Factor (lb/MMBtu)	Emission Factor Source		
PM	0.010	Manufacturer		
PM <sub>10</sub>	0.010	Manufacturer		
PM <sub>2.5</sub>	0.010	Manufacturer		
NO <sub>X</sub>	0.035	Manufacturer		
VOC	0.016	Manufacturer		
SO <sub>2</sub>	1.0 x 10 <sup>-3</sup>	Manufacturer		
СО	0.0375	Manufacturer		

<sup>&</sup>lt;sup>1</sup>Assume PM =  $PM_{10} = PM_{2.5}$ 

Emissions at design rate and 8760 hours per year of operation were below the APEN de miminis level for all pollutants except CO and  $NO_X$ . Therefore, the permit only includes emission limitations for CO and  $NO_X$ .

**3. Monitoring Plan:** The source shall be required to record fuel consumption and calculate CO and  $NO_X$  emissions monthly. Compliance with the opacity and particulate matter limitations will be presumed since natural gas is the only fuel permitted for use in this boiler.

### **Other Modifications**

In addition to the requested modifications made by the source, the Division used this opportunity to include changes to make the permit more consistent with recently issued permits, include comments made by EPA on other Operating Permits, as well as correct errors or omissions identified during inspections and/or discrepancies identified during review of this modification.

The Division has made the following revisions, based on recent internal permit processing decisions and EPA comments on other permits, to the Valmont Station Operating Permit with the source's requested modifications. These changes are as follows:

### Page Following Cover Page

- Changed the responsible official and permit contact.
- Included the full company name (i.e., "Public Service Company of Colorado", rather than "Public Service Company"). Note that this change is also reflected in the headers and footers and in the example reports in Appendices B and C.

• Changed the company address.

## Section I - General Activities and Summary

- Revised the language in Condition 1.1 to include the emergency fire pump in the description of the source.
- Revised the second column of the table in Condition 6.1 to "AIRS point number" and corrected some entries in this column.
- Included the emergency fire pump engine in the table in Condition 6.1.

### Section II.7 – Auxiliary Boiler

• Condition 7.6 refers to a future requirement for a case-by-case 112(j) MACT application. However, EPA promulgated final requirements for Industrial, Commercial and Institutional Boilers and Process Heaters in 40 CFR Part 63 Subpart DDDDD (Boiler MACT); therefore, a case-by-case 112(j) MACT application is no longer required. Although the Boiler MACT requirements apply to this boiler, because this unit is an existing boiler it has three (3) years to comply with the requirements in this rule. It is expected that this boiler will be removed from the site and/or rendered inoperable prior to the compliance date, therefore, the Division did not include the full requirements of the Boiler MACT in the permit for this unit but specified that an application be submitted to include the requirements within 30 days of the Boiler MACT compliance date.

#### <u>Section II.14 – Continuous Emissions and Opacity Monitoring Systems</u>

 The phrase "may elect to" in the first paragraph of Condition 14.4.3 was replaced with "shall".

#### Section II.21 – Regional Haze Requirements

• Section II.21 includes requirements from Colorado Construction Permit 07BO0110B, which was issued to address best available retrofit (BART) requirements. PSCo requested that this permit be cancelled on April 27, 2011. The emission limitations included in the BART construction permit (07BO0110B), were also included in Colorado Regulation No. 3, Part F and was part of the Division's regional haze state implementation plan (SIP) that was submitted to EPA Region 8 in 2009. EPA indicated that the SIP was not approvable; therefore, the Division addressed the issues raised by EPA and the regional haze requirements for BART units were included in Colorado Regulation No. 3, Part F, which was adopted by the AQCC in January 2011. Since the BART analyses conducted in 2007-2008 were revised and replaced by the January 2011 changes to Regulation No. 3, Part F, PSCo requested that their BART construction permit (07BO0110B) be canceled on April 27, 2011. Therefore, Section II.21 was removed from the permit. Note that the regional haze

requirements included in Reg 3, Part F have not been included in the permit at this time as inclusion of these requirements would not necessarily qualify as a minor modification but will be included at the next permit renewal or significant modification for this facility.

### "New" Section II.22 – Emergency Compression Ignition Engines

There are two engines included in the insignificant activity list that are considered insignificant activities under either the provisions in Colorado Regulation No. 3, Part C, Sections II.E.3.nnn (emergency generators) or xxx (stationary internal combustion engines). However, under the "catch-all" provisions in Regulation No. 3, Part C, Section II.E, sources that are subject to any federal or state applicable requirement, such as National Emission Standards for Hazardous Air Pollutants (NESHAPs), may not be considered insignificant activities.

EPA promulgated NESHAP requirements for Reciprocating Internal Combustion Engines (hereafter referred to as "RICE MACT") on June 15, 2004 and the requirements applied to new and existing engines greater than 500 hp located at major sources of HAPs. Under the initial rules, existing (commenced construction or reconstruction before December 19, 2002) emergency engines located at major sources of HAPs were not subject to any requirements (including initial notification) per 63.6590(b)(3). As indicated in the technical review document for the March 1, 2010 renewal permit, the emergency generator that is in the insignificant activity list is over 500 hp and was placed in service prior to December 19, 2002. Therefore the emergency generator is an existing emergency engine greater than 500 hp located at a major source of HAPs and is not subject to the RICE MACT requirements. As a result, this engine will remain in the insignificant activity list.

EPA promulgated revisions to the RICE MACT on March 3, 2010 which apply to existing (commenced construction or reconstruction before June 12, 2006) compression ignition engines of 500 hp or less located at major sources of HAP emissions. The emergency fire pump engine is less than 500 hp and was first placed in service prior to June 12, 2006. Therefore, it is subject to the March 3, 2010 revisions to the RICE MACT and it can no longer be considered an insignificant activity. Although the unit cannot be considered an insignificant activity, the Division has not adopted the March 3, 2010 revisions to the RICE MACT, so the engine is still exempt from APEN reporting and minor source construction permit requirements provided actual uncontrolled emissions are less than the APEN de minimis level (1 ton/yr). The emergency fire pump engine will be included in "new" Section II.22 of the permit.

Colorado Regulation No. 3, Part C, Section I.A.7.b specifies that "any change that is considered a modification under Title I of the Federal Act" be processed as a significant permit modification. Appendix G of Regulation 3 describes more specifically what constitutes a modification under Title I of the Federal Act. Appendix G (Section I.L, revisions adopted July 15, 1993, Subsection I.G for modifications) indicates that a modification which triggers either 111 (new source performance standards (NSPS)) or 112 (national emission standards for hazardous air pollutants (NESHAP)) requirements,

are considered Title I modifications. In general, the Division considers that modifications that trigger either NSPS or NESHAP requirements that consist only of non-substantive requirements, such as work practice standards or recordkeeping requirements can generally be processed as a minor modification. This is consistent with Division policy (PS Memo 99-06, revised February 27, 2008) regarding public comment requirements. PS Memo 99-06, specifies that public comment would not be required for area sources that are subject to non-substantive MACT requirements, such as recordkeeping or work practice requirements. Although this policy specifically applies to public comment requirements for area sources subject to non-substantive MACT requirements, this policy can be reasonably applied to major sources of HAPS that are subject to non-substantive MACT requirements. Therefore, the Division considers that the provisions for the emergency fire pump can be incorporated into the Title 5 permit utilizing the minor modification procedures.

The engine description is as follows:

John Deere Emergency Fire Pump System - Equipped with a Detroit Diesel, Model No. JWGH-UF60, Serial No. RG6081H167869, Diesel Fuel-Fired Engine, Rated at 360 hp and 16.5 gal/hr.

The appropriate applicable requirements for this engine are as follows:

- Except as provided for below, visible emissions shall not exceed 20% opacity (Reg 1, Section II.A.1)
- Visible emissions shall not exceed 30% opacity, for a period or periods aggregating more than six (6) minutes in any sixty (60) minute period, during fire building, cleaning of fire boxes, soot blowing, start-up, process modifications, or adjustment or occasional cleaning of control equipment (Reg 1, Section II.A.4)

Based on engineering judgment, the Division believes that the operational activities of fire building, cleaning of fire boxes and soot blowing do not apply to diesel engines. In addition, since this engine is not equipped with control equipment the operational activities of adjustment or occasional cleaning of control equipment do not apply to this engine. Finally, based on engineering judgment, it is unlikely that process modifications will occur with this emergency engine. Therefore, for this unit the 30% opacity provision only applies during startup. The 20% opacity requirement (noted in the above bullet) applies at all other times. Note 40 CFR Part 63 Subpart ZZZZ (table 2c, item 1 and § 63.6625(h)) specifies that startup shall not exceed 30 minutes

- SO<sub>2</sub> emission shall not exceed 0.8 lbs/mmBtu (Reg 1, Section VI.B.4.b.(i)).
- 40 CFR Part 63 Subpart ZZZZ requirements management practices (oil and filter change, inspect air cleaner and inspect hoses and belts)
- 40 CFR Part 63 Subpart A requirements

Since this engine is not subject to any emission limitations, monitoring requirements, notification and reporting requirements the requirements in §§ 63.7, 63.8, 63.9 and 63.10 do not apply. In addition, since this engine is existing the requirement in § 63.5 (preconstruction review and notification requirements) does not apply. Finally, Table 8 of Subpart ZZZZ indicates that operation and maintenance requirements in 63.6(e) do not apply. Therefore, the permit will only include the prohibition and circumvention requirements in § 63.4.

Since this unit is not subject to APEN reporting or minor source construction permit requirements, the permit will not include any requirements for calculating emissions.

Compliance with the opacity limit shall be monitored by conducting a Method 9 observation annually to monitor compliance with the 20% opacity requirement. If the engine operates for 250 hours is a calendar year, another Method 9 observation will be required. Since periods of startup are limited to 30 minutes a Method 9 observation to monitor compliance with the 30% opacity requirement will not be required.

### Section III – Acid Rain Requirements

• Changed the designated representative and alternate designated representative.

#### Section V – General Conditions

- Revised the version date.
- Revised General Condition 29 (VOC) to include a paragraph indicating that paragraphs a, b and e apply to sources located in an ozone non-attainment area or the Denver 1-hour ozone attainment/maintenance area and the requirements in paragraphs c and d apply statewide. In addition, the first phrase in paragraph a was removed.

#### Appendices

- The following changes were made to the insignificant activity list in Appendix A:
  - Removed the emergency fire pump engine.
  - Revised the insignificant activity category for the emergency generator to reflect changes to Reg 3, included the emergency generator size and added language indicating that an APEN would have to be filed for the engine if actual uncontrolled emissions exceed the APEN de minimis level.
- Included the emergency fire pump engine in the tables in Appendices B and C.
- Changed the Division contact for reports in Appendix D.

# **Opacity Streamlining Grid**

Reqmt Source	Normal	Start-up	Shutdown	Malfunction	Fire Building	Cleaning of Fire Boxes	Soot Blowing	Process Modifications	Adjustment of Control Equipment
Reg 1 Sections II.A.1 & 4	20%	30% with one 6 minute interval in excess of 30% per hour	20%	20 %	30% with one 6 minute interval in excess of 30% per hour	30% with one 6 minute interval in excess of 30% per hour	30% with one 6 minute interval in excess of 30% per hour	30 % with one 6 minute interval in excess of 30% per hour	30% with one 6 minute interval in excess of 30% per hour
Reg 6, Part B, Section II.C.3 - State Only	20%	No standard <sup>1</sup>	No standard <sup>1</sup>	No standard <sup>1</sup>	20%	20%	20%	20%	20%

Although the opacity standards are not applicable during start-up, shutdown and malfunction 40 CFR § 60.7(c) (2) requires the source to report each period of excess emissions that occurs during startups, shutdowns, and malfunctions, the nature of the malfunction and the corrective action taken or preventative measures adopted.

<sup>\*</sup> Shaded regions are the most stringent **Federal** requirements

<sup>\*\*</sup> Values in bold are the most stringent **State-only** requirements however **federal** requirements cannot be streamlined out of the permit due to more stringent **state-only** requirements